

Information Technology

13.1 Information Technology Based Tools

Administration of the forest practices program is heavily dependent on information technology-based tools. Tools include information systems, such as the FPARS, as well as discrete data sets, such as the hydrography layer that forms the basis of the water typing system. DNR directs and manages forest practices-related tool development within its forest practices and information technology divisions. Over the past year, activity has occurred in the areas of water typing, landslide hazard zonation, and forest practices risk assessment tool.

6533 forest practice applications have been entered into FPARS from June 5, 2006 through June 30, 2007. The FPARS data allows for both tabular and spatial data query. Currently, over 1400 reviewers receive notification of new applications in their area of interest.

As of March 2006, the water typing system was updated state-wide using a logistic regression model predicting stream reaches with fish habitat. The Forest Practices GIS section developed software tools that allow for the update of water typing information received on Water Type Modification Forms. These updates are based on direct observation in the field by DNR personnel, forest landowners, fish survey contractors, and others. Since June 2006, we have entered updates into the hydrography data set from 684 Water Type Modification Forms.

The goal of the Landslide Hazard Zonation (LHZ) Project is to create a vastly improved screening tool by better describing and mapping all potentially unstable slope areas in priority watersheds. During the 2007 fiscal year, 10 watersheds were completed by the LHZ mapping team, two others are in the external review process prior to finalization and five more are in the process of being mapped. As part of a cooperative mapping arrangement between DNR-state lands and DNR-forest practices, two state lands blocks were completed, with three more “in process”. Where we did not have access to the digital watershed analysis data for mass wasting, we have been digitizing the maps and tabular data. Most of that watershed analysis derived data is now incorporated into the LHZ databases (Landslide Inventory [LSI] and Landslide Hazard Zones [HaZone]).

In June 2006, the Forest Practices program implemented the Forest Practices Risk Assessment Mapping tool. This tool is an interactive mapping site on the DNR intranet. It gives DNR forest practices staff, in both the division and the region offices, access to GIS data related to the implementation of the forest and fish rules. This interactive mapping and reporting tool allows forest practices staff to see the geographic relationships between environmental features, including streams with fish habitat, potential landslide areas, archaeological sites, and listed animal species habitats, and the locations of proposed forest practice applications. There are currently over 60 data layers available for viewing and query with many more planned. Since June 2006, we have trained 113 forest practice staff in the use of this tool.